



DATA

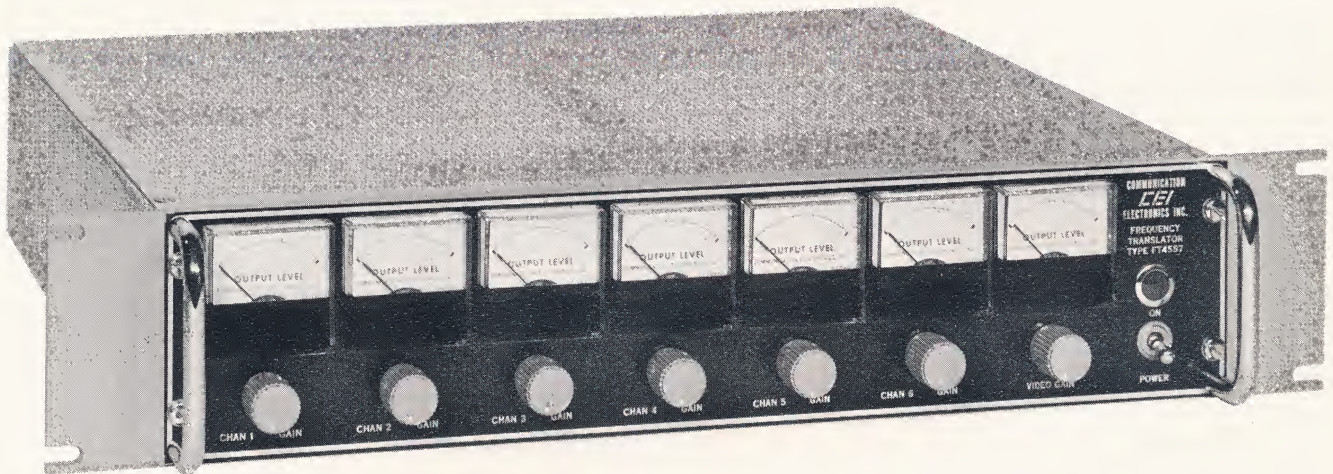
SHEET

435.50

1/21/65

Technical Data

TYPE FT-4557 FREQUENCY TRANSLATOR



The CEI solid state Type FT-4557 Frequency Translator is designed for pre-detection recording from communication receivers having a 455-kc IF. The unit will simultaneously accept the IF outputs from as many as six receivers, and convert them to six staggered frequencies between 580 kc and 1.33 mc. Each of these six input channels has a data bandwidth of 50 kc. An additional video input is provided which is not translated, having the same output frequency as the input. This channel can be used to record such things as timing signals, demodulated video signals from an additional receiver, or voice announcements. The seven inputs are combined in a summing network into a single output signal for recording by a wideband tape recorder.

By using the FT-4557, the input capability of a wideband tape recorder can be tremendously increased. A single seven-track recorder, for example, can simultaneously accept the inputs from 42 receivers when used with seven FT-4557's. In addition, seven video signals within the frequency range of 400 cps to 1.5 mc can be recorded at the same time. By using a single fourteen-track recorder in conjunction with fourteen FT-4557's, the output from 84 receivers can be simultaneously recorded, with an additional fourteen video input channels available. Thus, the FT-4557 reduces the number of wideband recorders required when large numbers of 455-kc signals must be recorded, often making it unnecessary to purchase additional expensive recorders to accommodate increased requirements. The number of tapes which must be processed and stored are also correspondingly reduced.

Since the six 455-kc input signals are translated by the FT-4557 up to frequencies in the standard broadcast band, each recorded signal can be demodulated by tuning to its frequency with a high-quality communications receiver. The recorded video channel may be fed directly into, for example, a spectrum analyzer or oscillograph. If this channel contains only audio signals, they may be fed to an audio amplifier for aural monitoring.

SPECIFICATIONS

Number of Inputs	Seven
Number of Outputs	One

COMMUNICATION ELECTRONICS INCORPORATED

6006 Executive Boulevard, Rockville, Maryland 20852 • Phone (301) 933-2800

Input Frequencies	455 kc (Channels 1-6) 400 cps to 1.5 mc (Video Channel)
Bandwidth	50 kc (Channels 1-6)
Output Frequencies of Input Channels.	Channel 1 580 kc Channel 2 710 kc Channel 3 810 kc Channel 4 1080 kc Channel 5 1230 kc Channel 6 1330 kc Video Same as input
Input Impedance	50 ohms, nominal (Channels 1-6) 91 ohms, nominal (Video Channel)
Input Level Required	Between 2 and 20 mv rms (Channels 1-6) 100 mv rms (Video Channel)
Output Impedance	50 ohms, nominal
Output Level	1 volt rms
Harmonic Distortion.	Less than 1%
Frequency Conversion Stability	Better than $\pm 0.005\%$
Controls	Output level control and meter for each input channel
Type of Connectors	BNC
Power Input	115 volts, 50-400 cps
Power Consumption	12 watts, approximately
Over-all Dimensions	3.5 inches high, 19 inches wide, and 16.9 inches deep

PRICE: \$2,900.00

FOB Rockville, Maryland. Taxes extra where applicable. Prices and specifications subject to change without notice.